

Online appendix to *Chicago Fed Letter* No. 502
The evolution of disagreement about long-run inflation, 2007–24

Jonas D.M. Fisher, senior vice president and director of macroeconomic research, and
Kavitya Sarma, research assistant

In our [Chicago Fed Letter](#), we examine disagreement about long-run U.S. inflation in two closely watched surveys over the period 2007–24.

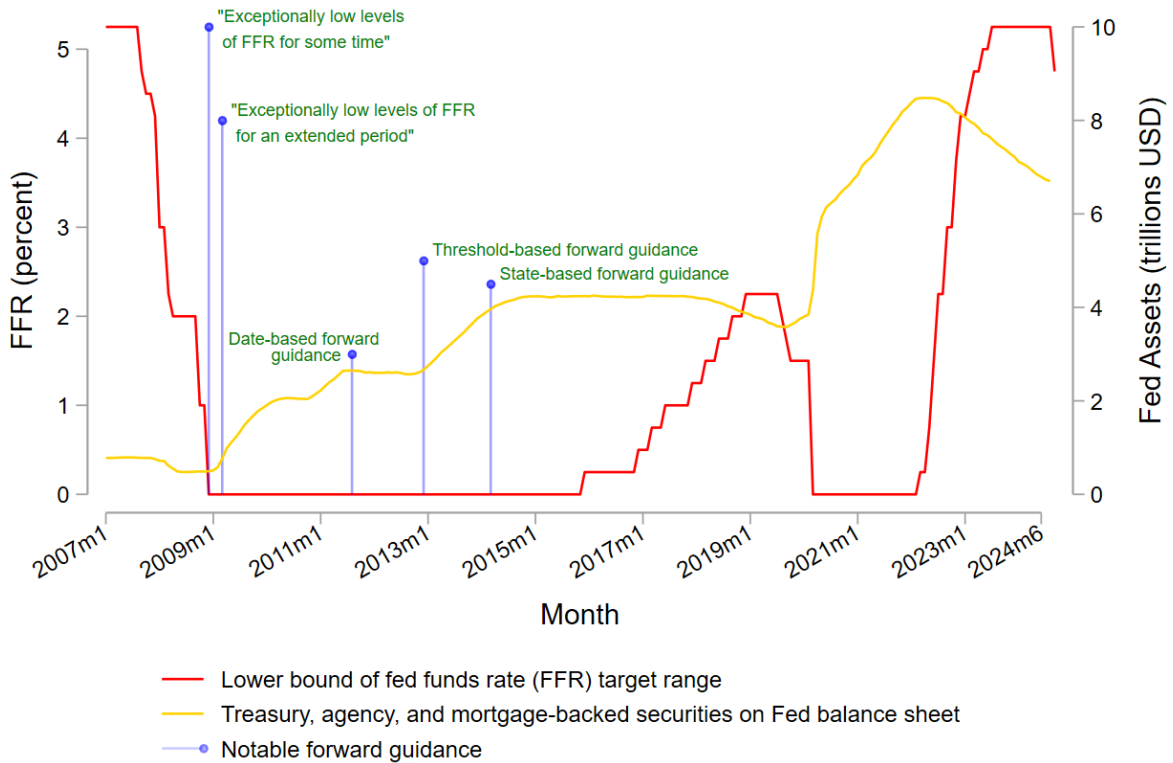
Figure A1 displays the federal funds rate (FFR), the Fed’s balance sheet assets, and notable changes in forward guidance about the path of the FFR over the sample period.

Figure A2 lists key milestones in the Fed’s communications about its long-term goal for inflation.

Figure A3 displays the share of (low and high) outliers, along with the standard deviation, skewness, and kurtosis, associated with each histogram for the [Survey of Professional Forecasters](#) (SPF) data on respondents’ expectations for five- to ten-year inflation according to the Price Index for Personal Consumption Expenditures (PCE) (in figure 2 of the main article).

Figure A4 displays the share of (low and high) outliers, along with the standard deviation, skewness, and kurtosis, associated with each histogram for the [University of Michigan Surveys of Consumers](#) (MSC) data on respondents’ five- to ten-year inflation expectations (in figure 3 of the main article).

A1. Federal funds rate, Federal Reserve assets, and forward guidance, January 2007–June 2024



Note: For more on forward guidance, see the Federal Reserve Board [webpage](#).

Sources: Board of the Governors of the Federal Reserve System and Haver Analytics.

A2. Key milestones in the FOMC’s communications about its long-run inflation objective

Date	Communication
2002	Transcript of July 2–3, 1996, FOMC meeting, where an informal consensus was reached that a long-term inflation objective of around 2% was consistent with price stability, is released to the public.
April 29, 2009	First SEP with longer-run inflation projections. The central tendency ranged between 1.7% and 2.0%. This central tendency changed little up to the last SEP before the release of the FOMC’s formal policy framework.
January 25, 2012	Inaugural statement of the FOMC’s policy framework in which the 2% long-run inflation goal is set. The statement is reaffirmed each January through 2019.
September 13, 2012	Reference to 2% inflation goal first appears in post-FOMC-meeting statement. References appear in virtually all statements afterward.
January 26, 2016	Framework statement amended to clarify that 2% was a “symmetric” goal. The statement added, “The Committee would be concerned if inflation were running persistently above or below this [2%] objective.”
March 15, 2017	First mention of “symmetric inflation goal” in post-FOMC-meeting statement. Similar references appear in most subsequent post-meeting statements through July 29, 2020.
August 27, 2020	Amended long-run policy statement introduces “flexible average inflation targeting.” Reaffirmed each January through 2024.
September 16, 2020	First post-FOMC-meeting statement with the following: “The Committee will aim to achieve inflation moderately above 2 percent for some time so that inflation averages 2 percent over time and longer-term inflation expectations remain well anchored at 2 percent.” It appears in subsequent post-meeting statements through November 3, 2021.
June 15, 2022	First post-FOMC-meeting statement with the following sentence: “The Committee is strongly committed to returning inflation to its 2 percent objective.” It has appeared in every post-meeting statement since.
August 26, 2022	Chair Powell gives an unusually brief speech at the annual monetary conference hosted by the Kansas City Fed in Jackson Hole, WY. The speech emphasizes the Committee’s firm commitment to return inflation to its 2% objective even if involves inflicting “pain.”

Notes: FOMC stands for Federal Open Market Committee. SEP stands for Summary of Economic Projections. The SEP is discussed in the main article. The terms “goal” and “objective” are used interchangeably in post-meeting FOMC statements. The term “flexible average inflation targeting” is not used in the monetary policy framework statement amended in August 2020, but it is often used in public commentary to describe the monetary policy strategy outlined in the statement.

Source: Board of Governors of the Federal Reserve System.

A3. Statistics for mean of responses by forecaster in the SPF, by year

<i>Year</i>	<i>Percent low</i>	<i>Percent high</i>	<i>Standard deviation</i>	<i>Skewness</i>	<i>Kurtosis</i>	<i>n</i>
2007	1.7	3.4	0.4	1.3	5.8	59
2008	3.6	3.6	0.5	0.9	5.1	56
2009	4	18	0.8	1.5	6	50
2010	2.3	18.6	0.8	2.2	10.7	43
2011	9.1	15.9	0.8	2.2	12.3	44
2012	2.2	11.1	0.7	3.2	17.2	45
2013	2.3	2.3	0.4	0.4	3.4	44
2014	2.4	4.8	0.4	0.4	2.8	42
2015	0	7.1	0.5	2	8	42
2016	0	5.4	0.4	2.6	11.1	37
2017	0	2.7	0.6	4.5	24.8	37
2018	0	0	0.2	1.3	6.8	38
2019	0	2.6	0.3	3.2	17	38
2020	2.6	0	0.3	0.7	4.5	39
2021	0	0	0.2	0.5	3.4	33
2022	9.7	0	0.4	-1.1	6.7	31
2023	2.9	0	0.3	-0.3	4.5	35
2024	3.1	0	0.2	-2.0	9.4	32

Notes: Percent low is the percentage of forecasters' mean responses that are 1.5% and below in a given year. Percent high is the percentage of forecasters' mean responses that are 3% and above in a given year. The last observation is from 2024:Q3.

Source: Authors' analysis of data from Federal Reserve Bank of Philadelphia, *Survey of Professional Forecasters* (SPF).

A4. Statistics for mean of responses by respondent in the MSC, by year

<i>Year</i>	<i>Percent low</i>	<i>Percent high</i>	<i>Standard deviation</i>	<i>Skewness</i>	<i>Kurtosis</i>	<i>n</i>
2007	2.5	8.3	2.8	1.1	7.6	4,304
2008	7.0	10.6	3.4	0.2	6.4	4,276
2009	6.0	9.1	3.3	0.4	7.7	4,352
2010	4.1	8.3	3.0	0.9	7.8	4,384
2011	4.5	8.7	3.0	0.7	6.5	4,293
2012	4.4	7.9	3.0	0.8	7.5	4,352
2013	2.7	9.4	3.1	1.4	8.4	4,618
2014	2.0	7.7	2.8	1.4	8.7	4,603
2015	2.5	6.3	2.6	1.4	8.9	4,720
2016	3.3	5.6	2.6	1.2	8.1	5,064
2017	3.8	4.9	2.6	1.4	9.1	5,592
2018	3.2	4.9	2.5	1.3	9.8	5,601
2019	3.6	4.8	2.5	1.4	10.3	5,495
2020	3.5	4.8	2.5	1.0	10.0	5,242
2021	4.6	10.3	3.6	1.7	10.3	5,040
2022	12.9	13.7	6.3	2.1	23.2	5,147
2023	9.8	12.7	6.8	3.3	22.3	5,226
2024	8.1	14.6	8.4	2.3	18.4	5,004

Notes: Percent low is the percentage of respondents' mean responses that are 0% and below in a given year. Percent high is the percentage of respondents' mean responses that are 7% and above in a given year. The last observation is from August 2024.

Source: Authors' analysis of public microdata from the University of Michigan, *Surveys of Consumers* (MSC).